

a2
UNCCL

direction and the base core is bent into a cylindrical shape in a later process in order to improve the space factor of the conductors in the slots. Figure 45 is an overall perspective of the stator 400 manufactured by this method. Although, insertion of the winding groups is significantly improved, because the winding groups have straight bridging portions extending circumferentially between the slots 401, the alignment of coil ends 402 extending outwards from the slots 401 is significantly poor, leading to increased radial dimensions and short-circuiting between the conductors in the coil ends 402. Furthermore, because the straight-shaped base core is made into a cylinder without modification, a significant amount of bending force is required and spring back is strong, leading to problems such as the formation of gaps at the joined surfaces in the resulting cylinder, and to deterioration in output and magnetic noise, etc.

IN THE CLAIMS:

Please enter the following amended claims:

a3
5/10

1. (Amended) An alternator comprising:
a rotor for forming north-seeking (N) and south-seeking (S) poles alternately about a rotational circumference; and
a stator comprising: a stator core surrounding said rotor; and a polyphase stator winding installed in said stator core, said stator core being formed with a number of slots extending axially at a predetermined pitch in a circumferential direction,
said polyphase stator winding comprising a number of winding portions in which long strands of wire are wound so as to alternately occupy an inner layer and an outer layer in a slot depth direction within said slots at intervals of a predetermined number of slots, said strands of wire folding back outside said slots at both axial end surfaces of said stator core, and
said stator core being provided with an abutting portion extending axially such that said stator core becomes an annular shape by joining ends of said stator core at said abutting portion.